Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). An apparatus for evaluating an electrochemical reaction, the apparatus comprising:

an electrochemical cell comprising a cavity for containing a liquidus electrolyte, a first working electrode having at least one electrolytic surface at least partially within the cavity, and a ~~second~~ counter electrode having at least one electrolytic surface at least partially within the cavity, the first working electrode comprising a body and an insert supported by the body, each of the insert and the body consisting essentially of a high-temperature material allowing for preparation or processing of the at least one electrolytic surface at a temperature of at least ~~300 °C~~ 2000 °C; and

a drive system detachably coupled to the first working electrode or a portion thereof for effecting relative motion between the at least one electrolytic surface of the working electrode and a bulk portion of the liquidus electrolyte.

Claim 2 (original): The apparatus of claim 1 wherein the first working electrode is a rotating disk electrode.

Claim 3 (original): The apparatus of claim 1 wherein the at least one electrolytic surface is formed on or integral with the insert.

Claim 4 (original): The apparatus of claim 3 wherein the first working electrode comprises at least two electrolytic surfaces, each of said at least two electrolytic surfaces being electrically-isolated from one another.

Claim 5 (currently amended): The apparatus of claim 1 wherein the at least one electrolytic surface of the first working electrode is formed from a physical vapor deposition coating.

Claim 6 (original): The apparatus of claim 1 wherein the insert is formed from carbon.

Claim 7 (currently amended): ~~The apparatus of claim 1 wherein the body is~~ An apparatus for evaluating an electrochemical reaction, the apparatus comprising:

an electrochemical cell comprising a cavity for containing a liquidus electrolyte, a first working electrode having at least one electrolytic surface at least partially within the cavity, and a counter electrode having at least one electrolytic surface at least partially within the cavity, the first working electrode comprising a body formed from graphite and an insert supported by the body, each of the insert and the body consisting essentially of a high-temperature material allowing for preparation or processing of the at least one electrolytic surface at a temperature of at least 300 °C; and

a drive system detachably coupled to the first working electrode or a portion thereof for effecting relative motion between the at least one electrolytic surface of the working electrode and a bulk portion of the liquidus electrolyte.

Claim 8 (currently amended): The apparatus of ~~claim 8~~ claim 7 wherein the body is coated with boron nitride.

Claim 9 (currently amended): ~~The apparatus of claim 1 wherein the body is~~ An apparatus for evaluating an electrochemical reaction, the apparatus comprising:

an electrochemical cell comprising a cavity for containing a liquidus electrolyte, a first working electrode having at least one electrolytic surface at least partially within the cavity, and a counter electrode having at least one electrolytic surface at least partially within the cavity, the first working electrode comprising a body formed from aluminum and ~~the body comprises~~ an external anodize coating. and an insert supported by the body, each of the insert and the body consisting essentially of a high-temperature material allowing for preparation or processing of the at least one electrolytic surface at a temperature of at least 300 °C; and

a drive system detachably coupled to the first working electrode or a portion thereof for effecting relative motion between the at least one electrolytic surface of the working electrode and a bulk portion of the liquidus electrolyte

Claim 10 (currently amended): ~~The apparatus of claim 1 wherein the body is~~ An apparatus for evaluating an electrochemical reaction, the apparatus comprising:

an electrochemical cell comprising a cavity for containing a liquidus electrolyte, a first working electrode having at least one electrolytic surface at least partially within the cavity, and a counter electrode having at least one electrolytic surface at least partially within the cavity, the first working electrode comprising a body formed from steel and an insert supported by the body, each of the insert and the body consisting essentially of a high-temperature material allowing for preparation or processing of the at least one electrolytic surface at a temperature of at least 300 °C; and

a drive system detachably coupled to the first working electrode or a portion thereof for effecting relative motion between the at least one electrolytic surface of the working electrode and a bulk portion of the liquidus electrolyte.

Claim 11 (currently amended): The apparatus of ~~claim 1~~ claim 7 wherein the high-temperature material allows for preparation or processing of the at least one electrolytic surface at a temperature of at least 600 °C.

Claim 12 (currently amended): The apparatus of ~~claim 1~~ claim 7 wherein the high-temperature material allows for preparation or processing of the at least one electrolytic surface at a temperature of at least 1000 °C.

Claim 13 (currently amended): The apparatus of ~~claim 1~~ claim 7wherein the high-temperature material allows for preparation or processing of the at least one electrolytic surface at a temperature of at least 2000 °C.

Claim 14 (currently amended): The apparatus of ~~claim 1~~ claim 9 wherein the drive system coupling to the first working electrode includes two independent electrical contact points.

Claim 15 (original): The apparatus of claim 14 wherein one contact point is configured to carry current and the other contact point is configured for voltage sensing.

Claim 16 (currently amended): An apparatus for simultaneously evaluating multiple electrochemical reactions, the apparatus comprising:

a plurality of electrochemical cells, each of said plurality of electrochemical cells comprising a cavity for containing a liquidus electrolyte, a first working electrode having at least one electrolytic surface at least partially within the cavity, and a ~~second~~ counter electrode having at least one electrolytic surface at least partially within the cavity; and

a drive system mechanically coupled by a common drive shaft to the first working electrode or a portion thereof of each of the plurality of electrochemical cells for simultaneously effecting relative motion between the at least one electrolytic surface of each working electrode and a bulk portion of its respective liquidus electrolyte.

Claim 17 (original): The apparatus of claim 16 wherein the at least one electrolytic surface is defined by different materials as compared between each of said plurality of electrochemical cells.

Claim 18 (original): The apparatus of claim 16 wherein the first working electrode comprises an electrically insulating body and an electrically conductive insert supported by the body.

Claim 19 (original): The apparatus of claim 18 wherein said at least one electrolytic surface is formed on the insert.

Claim 20 (original): The apparatus of claim 18 wherein the insert comprises a high-temperature material allowing for preparation or processing of said at least one electrolytic surface at a temperature of at least 300°C.

Claim 21 (original): The apparatus of claim 16 wherein each of said plurality of electrochemical cells is movable independent from the other cells to vary an insertion depth of the at least one electrolytic surface relative to a depth of the liquidus electrolyte.

Claim 22 (original): The apparatus of claim 16 wherein the first working electrode is a rotating disk electrode.

Claim 23 (original): The apparatus of claim 16 further comprising a processor configured for controlling electrochemical reactions within each of said plurality of electrochemical cells.

Claim 24 (original): The apparatus of claim 16 further comprising a processor configured for evaluating electrochemical reactions within each of said plurality of electrochemical cells.

Claim 25 (original): The apparatus of claim 16 wherein the first working electrode is formed at least partially from a high-temperature material allowing for testing at a temperature of at least 80°C.

Claim 26 (original): An apparatus for simultaneously evaluating multiple electrochemical reactions, the apparatus comprising an electrochemical cell comprising:

a cavity for containing a liquidus electrolyte;

a plurality of working electrodes each having at least one electrolytic surface positioned at least partially within the cavity, said at least one electrolytic surface

being defined by different materials as compared between each of said plurality of working electrodes;

at least one counter electrode having at least one electrolytic surface positioned at least partially within the cavity; and

a drive system coupled to the first working electrodes or a portion thereof for effecting relative motion between said at least one electrolytic surface of the working electrode and a bulk portion of the liquidus electrolyte.

Claim 27 (original): The apparatus of claim 26 wherein each of said plurality of working electrodes comprises an electrically insulating body and an electrically conductive insert supported by the body.

Claim 28 (original): The apparatus of claim 27 wherein said at least one electrolytic surface is formed on the insert.

Claim 29 (original): The apparatus of claim 27 wherein the insert comprises a high-temperature material allowing for preparation or processing of said at least one electrolytic surface at a temperature of at least 300°C.

Claim 30 (currently amended): A parallel electrochemical apparatus for screening a plurality of materials, the apparatus comprising:

a plurality of electrochemical cells, each of said plurality of electrochemical cells comprising a cavity for containing a liquidus electrolyte; and

a plurality of electrodes, each of said plurality of electrodes comprising at least one electrolytic surface for positioning at least partially within the cavity;

wherein each of the plurality of electrochemical cells is movable independent from the other cells to vary an insertion depth of the electrode within the cavity and the position of each of the plurality of electrochemical cells is controlled by a processor.

Claim 31 (original): The apparatus of claim 30 wherein the electrode comprises a body and an insert supported by the body, said at least one electrolytic surface being formed on or integral with the insert.

Claim 32 (original): The apparatus of claim 31 wherein each of the body and the insert comprises a high-temperature material allowing for processing of the at least one electrolytic surface at a temperature of at least 300°C.

Claim 33 (original): The apparatus of claim 30 wherein the electrodes are rotating disk electrodes.

Claims 34-37 (canceled).

Claim 38 (currently amended): A method of making a working electrode, the method comprising:

providing a body;

applying an external coating to the body to create an external sleeve using a chemical process; and

inserting an insert formed from an electrode material into an opening in one end of the body;

wherein the material of the body and the material of the insert allow for preparation or processing of the ~~rotating disk~~ working electrode at temperatures greater than 300°C.

Claim 39 (currently amended): The method of ~~claim 38~~ claim 78 wherein performing said process comprises ~~further comprising~~ applying a physical vapor deposition coating to ~~an~~ said exposed end of the insert to form ~~an~~ the electrolytic surface.

Claim 40 (currently amended): The method of ~~claim 38~~ claim 78 wherein performing said process comprises ~~further comprising~~ electroplating ~~an~~ said exposed end of the insert to form ~~an~~ the electrolytic surface.

Claim 41 (currently amended): The method of ~~claim 38~~ claim 78 wherein performing said process comprises ~~further comprising~~ modifying ~~an~~ said exposed end of the insert by liquid dispensing a chemical solution.

Claim 42 (currently amended): The method of ~~claim 38~~ claim 78 wherein performing said process comprises ~~further comprising~~ modifying ~~an~~ said exposed end of the insert with powder impregnation.

Claim 43 (original): The method of claim 38 wherein the external sleeve is formed from an electrical insulating material.

Claim 44 (original): The method of claim 38 wherein the external sleeve is formed from an electrochemically inert material.

Claim 45 (original): The method of claim 38 further comprising inserting the rotating disk electrode into an electrochemical cell for electrochemical screening.

Claim 46 (currently amended): The method of claim 38 wherein said chemical process ~~applying an external coating~~ comprises subjecting the body to chemical vapor deposition.

Claim 47 (currently amended): The method of claim 38 wherein said chemical process ~~applying an external coating~~ comprises growing a boron nitride layer to form the external sleeve.

Claim 48 (original): The method of claim 38 wherein the body is formed from graphite.

Claim 49 (original): The method of claim 48 wherein the insert is formed from carbon.

Claim 50 (currently amended): The method of claim 38 wherein said chemical process ~~applying an external coating~~ comprises anodizing external surfaces of the body.

Claim 51 (original): The method of claim 50 wherein the body is formed from aluminum.

Claim 52 (original): The method of claim 38 wherein the body is formed from steel.

Claim 53 (currently amended): The method of claim 52 wherein said chemical process ~~applying an external coating~~ comprises applying Silcosteel®.

Claim 54 (original): The method of claim 38 wherein the materials of the body and the insert allow for processing or preparation of the rotating disk electrode at a temperature of at least 600°C.

Claim 55 (original): The method of claim 38 wherein the materials of the body and insert allow for processing or preparation of the rotating disk electrode at a temperature of at least 2000°C.

Claim 56 (original): The method of claim 38 further comprising detachably coupling the rotating disk electrode to a drive shaft.

Claim 57 (currently amended): A rotating disk electrode comprising:

an insert formed from an electrode material;

a tubular member having an opening formed at one end thereof for receiving the insert; ~~and~~

a coating applied to an external surface of the tubular member to form an electrical insulating sleeve; and

a physical vapor deposition coating applied to an exposed end of the insert to form an electrolytic surface;

wherein the material of the ~~body~~ tubular member and the material of the insert allow for processing or preparation of the rotating disk electrode at temperatures greater than 300°C.

Claim 58 (canceled).

Claim 59 (currently amended): The rotating disk electrode of ~~claim 58~~ claim 57 wherein the coating applied to the external surface of the tubular member comprises boron nitride.

Claim 60 (currently amended): ~~The rotating disk electrode of claim 57 wherein the coating applied to the external surface of the tubular member comprises~~ A rotating disk electrode comprising:

an insert formed from an electrode material;

a tubular member having an opening formed at one end thereof for receiving the insert;

an anodize coating applied to an external surface of the tubular member to form an electrical insulating sleeve; and

wherein the material of the electrical insulating sleeve and the material of the insert allow for processing or preparation of the rotating disk electrode at temperatures greater than 300°C.

Claim 61 (original): The rotating disk electrode of claim 60 wherein the tubular member is formed from aluminum.

Claim 62 (currently amended): ~~The rotating disk electrode of claim 57 wherein the tubular member is~~ A rotating disk electrode comprising:

an insert formed from an electrode material;

a tubular member formed from steel and having an opening formed at one end thereof for receiving the insert;

a coating applied to an external surface of the tubular member to form an electrical insulating sleeve; and

wherein the material of the electrical insulating sleeve and the material of the insert allow for processing or preparation of the rotating disk electrode at temperatures greater than 300°C.

Claim 63 (original): The rotating disk electrode of claim 57 wherein the materials of the tubular member and insert allow for processing of the rotating disk electrode at a temperature of at least 2000°C.

Claim 64 (currently amended): The rotating disk electrode of ~~claim 57~~ claim 60 further comprising a drive shaft assembly detachably coupled to the rotating disk electrode.

Claim 65 (original): The rotating disk electrode of claim 64 wherein the drive shaft assembly is coupled to the rotating disk electrode with a slip fit.

Claim 66 (original): The rotating disk electrode of claim 64 wherein the drive shaft assembly and rotating disk electrode comprise two separate electrical contact points when coupled together.

Claim 67 (original): The rotating disk electrode of claim 66 wherein one contact point is configured to carry current and the other contact point is configured for voltage sensing.

Claim 68 (currently amended): The rotating disk electrode of ~~claim 57~~ claim 62 wherein the insert and the tubular member opening are sized to create a liquid tight seal therebetween.

Claim 69 (original): The rotating disk electrode of claim 57 wherein the sleeve has a thickness of about 0.1 mm to 1.0 mm.

Claim 70 (original): The rotating disk electrode of claim 57 wherein the sleeve has a thickness of about 0.5 um to 50.0 um.

Claim 71 (currently amended): ~~The rotating disk electrode of claim 57~~ A rotating disk electrode comprising:

an insert formed from an electrode material;

a tubular member having an opening formed at one end thereof for receiving the insert, wherein the thermal expansion coefficient of the tubular member is about ten times greater than the thermal expansion coefficient of the insert;

a coating applied to an external surface of the tubular member to form an electrical insulating sleeve; and

wherein the material of the electrical insulating sleeve and the material of the insert allow for processing or preparation of the rotating disk electrode at temperatures greater than 300°C.

Claim 72 (currently amended): ~~The rotating disk electrode of claim 57~~ A rotating disk electrode comprising:

an insert formed from an electrode material;

a tubular member having an opening formed at one end thereof for receiving the insert, wherein the thermal expansion coefficient of the tubular member is generally the same as the thermal expansion coefficient of the insert;

a coating applied to an external surface of the tubular member to form an electrical insulating sleeve; and

wherein the material of the electrical insulating sleeve and the material of the insert allow for processing or preparation of the rotating disk electrode at temperatures greater than 300°C.

Claim 73 (currently amended): A rotating disk electrode comprising:

a body formed from an electrical insulating material;

an insert formed from glassy carbon, supported by the body and comprising an electrolytic surface being formed on or integral with the insert;

wherein the material of the body and the material of the insert allow for processing or preparation of the electrolytic surface at a temperature of at least 300°C.

Claim 74 (original): The rotating disk electrode of claim 73 wherein the body is formed from a ceramic material.

Claim 75 (currently amended): ~~The rotating disk electrode of claim 73 wherein the body is~~A rotating disk electrode comprising:

a body formed from sapphire;

an insert supported by the body and comprising an electrolytic surface being formed on or integral with the insert;

wherein the material of the body and the material of the insert allow for processing or preparation of the electrolytic surface at a temperature of at least 300°C.

Claim 76 (canceled).

Claim 77 (currently amended): The rotating disk electrode of ~~claim 73~~ claim 75 wherein the materials of the body and insert allow for processing of the rotating disk electrode at a temperature of at least 1000°C.

Claim 78 (new): A method of making a working electrode, the method comprising:

providing a body;

applying an external coating to the body to create an external sleeve;

inserting an insert formed from an electrode material into an opening in one end of the body; and

performing a process on an exposed end of the insert to form the electrolytic surface, the electrolytic surface having a different composition than the insert;

wherein the material of the body and the material of the insert allow for preparation or processing of the working electrode at temperatures greater than 300°C.